In the claims:

1. A method of updating bias of a signal model in a sequential manner, comprising the steps of:

   introducing an adjustable bias in the distribution parameter of the signals;

   updating the bias every time a new observation of the signal is available; and

   calculating the updated new bias by adding a correction item to the old bias.

2. The method of claim 1 wherein the bias can be defined on each HMM state.

3. The method of claim 1 wherein the bias is shared among different states.

4. The method of claim 1 wherein the bias is shared by groups of states.

5. The method of claim 1 wherein the bias is shared by all the distribution of a recognizer.

6. The method of claim 1 wherein the correction term is calculated based on the information of both current model parameters and the incoming observed signals.

7. The method of claim 1 wherein the correction term is calculated based on the information of both information derived from all signals provided to the recognizer and the incoming observed signals.

8. The method of claim 1 wherein the signal comprises a speech signal.

9. The method of claim 1 wherein new available data from a new observation of the signals could be based on any length.

10. The method of claim 1 wherein new available data from a new observation is a frame.

11. The method of claim 1 wherein new available data from a new observation is an , utterance.

12. The method of claim 1 wherein new available data from a new observation is every fixed length of speech signal.

13. The method of claim 1 wherein new available data from a new observation is every 10 minutes of speech signal.

14. The method of claim 1 wherein the correction is the product of any sequence whose limit is zero, whose summation is infinity and whose square summation is not infinity and the summation of the quantities weighted by a probability, the quantities are based on the divergence of desired model parameter and observed signal.